

ABSTRACT OF THE DISCLOSURE

The wavelength multiplexing optical transmission system is provided with a wave divider that divides received wavelength-multiplexed light signal for each predetermined 5 channel block. Further, PMD compensation circuits compensate the PMD of each light signal. Wavelength variable filter selectively outputs only light signal having a desired wavelength. Polarization analyzing sections analyze polarization using Jones Matrix method. Finally, 10 compensation control sections control the PMD compensation by each PMD compensating circuit based on the result of analysis in each polarization analyzing section.